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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,550	01/27/2004	David Marshall	200208614-1	1640

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EXAMINER

LEE, WILSON

ART UNIT PAPER NUMBER

2163

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/765,550

Applicant(s)

MARSHALL ET AL.

Examiner

Wilson Lee

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/27/04</u> . | 6) <input type="checkbox"/> Other: ____. |

Claim Rejections – 35 U.S.C. 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2, 8 and 14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In claim 2, “immune to corruption in an event of an unsuccessful compilation in the trusted space environment” has not been taught and supported in the specification to enable one skilled in the art to make or use the invention.

In claim 8, “isolating said trusted space environment from said design database environment” has not been taught and supported in the specification to enable one skilled in the art to make or use the invention.

In claim 14, “isolating said trusted space environment from said design database environment” has not been taught and supported in the specification to enable one skilled in the art to make or use the invention.

Claim Rejections – 35 U.S.C. 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-7, 9-13, 15-20, 22-31, 33-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Limon Jr et al. (6,453,435).

Regarding Claim 1, Limon Jr discloses a system for updating a library in a design database environment operable to be accessed by one design user comprising:

- a first engine (disk drive in test station) for associating an update file with appropriate design objects to generate an uncompiled update file in a trusted space environment (See abstract and Figure 1);
- a second engine (processor) associated with the trusted space environment for compiling the uncompiled update file into a compiled updated file (See Col. 7, lines 15-56 and Figures 1, 2); and
- a third engine (file transfer protocol, FTP) for transferring the compiled update file from the trusted space environment into the library in the design database environment (See Col. 7, lines 30-42 and Col. 20, lines 43-59).

Regarding Claim 3, Limon Jr discloses that said update file includes files relating to a design element selected from the group consisting of gates, latches, passive elements, combinatorial elements (a variety of different types of circuit boards, components of the circuit boards) (See Col. 6, lines 49-67).

Regarding Claim 4, Limon Jr discloses that said third engine effectuates the transfer of said compiled update file via a symbolic link (dynamic link) between said trusted space environment and said design database environment. (See Col. 7, lines 31-56).

Regarding Claim 5, Limon Jr discloses that said third engine (file transfer protocol, FTP) is operable to transfer said compiled update file from said trusted space environment into an archive database (28) (See Col. 9, lines 27-44 and Figures 1 and 2).

Regarding Claim 6, Limon Jr discloses that said first engine, said second engine, and said third engine are integrated within a synthesis interface (network 17) (See Figure 1, 2).

Regarding Claim 7, Limon Jr discloses a computer-implemented method for updating a library in a design database environment operable to be accessed by at least one design user, comprising:

- associating an update file with appropriate design objects to generate uncompiled update file in a trusted space environment (See abstract and Figure 1)
- compiling said update file to produce a compiled update file in said trusted space environment (See Col. 7, lines 15-56 and Figures 1, 2); and
- transferring said compiled update file from said trusted space environment into said library in said design database environment (See Col. 7, lines 30-42 and Col. 20, lines 43-59).

Regarding Claim 9, Limon Jr discloses the computer-implemented method further comprising transferring said compiled update file from said trusted space environment to an archive database (28) (See Col. 9, lines 27-44 and Figures 1 and 2).

Regarding Claim 10, Limon Jr discloses the computer-implemented method further comprising building a symbolic link (dynamic link) from said trusted space environment to said library in said design database environment (See Col. 7, lines 31-56).

Regarding Claim 11, Limon Jr discloses that the operation of transferring said compiled update file further comprises transferring (thru FTP) said compiled update file from said trusted space environment into said library in said design database environment via said symbolic link (dynamic link) (See Col. 7, lines 31-56). (See Col. 7, lines 30-42 and Col. 20, lines 43-59).

Regarding Claim 12, Limon Jr discloses the computer-implemented method further comprising incorporating said compiled update file into a synthesis file structure (network 17) within said design database environment (See Figures 1, 2).

Regarding Claim 13, Limon Jr discloses a computer-readable medium operable with a computer platform for updating a library in a design database environment operable to be accessed by at least one design user, the medium having stored thereon:

- instructions for associating an update file with appropriate design objects to generate an uncompiled update file in a trusted space environment (See abstract and Figure 1);
- instructions for compiling said update file to produce a compiled update file in said trusted space environment (See Col. 7, lines 15-56 and Figures 1, 2);
- and

- instructions for transferring said compiled update file from said trusted space environment into said library in said design database environment (See Col. 7, lines 30-42 and Col. 20, lines 43-59).

Regarding Claim 15, Limon Jr discloses the computer-readable medium as recited further comprising instructions for transferring said compiled update file from said trusted space environment to an archive database (28) (See Col. 9, lines 27-44 and Figures 1 and 2).

Regarding Claim 16, Limon Jr discloses the computer-readable medium further comprising instructions for building a symbolic link (dynamic link) from said trusted space environment to said library in said design database environment (See Col. 7, lines 31-56). (See Col. 7, lines 30-42 and Col. 20, lines 43-59).

Regarding Claim 17, Limon Jr discloses that said instructions for transferring said compiled update file further comprise instructions for transferring (thru FTP) said compiled update file from said trusted space environment into said library in said design database environment via said symbolic link (dynamic link) (See Col. 7, lines 31-56). (See Col. 7, lines 30-42 and Col. 20, lines 43-59).

Regarding Claim 18, Limon Jr discloses the computer-readable medium further comprising instructions for incorporating said compiled update file into a synthesis file structure (network 17) within said design database environment. (See Figures 1, 2).

Regarding Claim 19, Limon Jr discloses a computer system, comprising:

- a database design environment having a design library (52, 28, disk drive in test station) (See abstract and Figure 1);

- a user interface (41) operable to generate updates for said library; and
- a synthesis interface (network 17) for transferring said updates from said user interface to said design library by establishing a trusted space environment that provides for building of said updates prior to the transfer of said updates (See Figures 1, 2).

Regarding Claim 20, Limon Jr discloses that the design library is a library selected from the group consisting of a primary library (52) (See Figure 1), an archive library (28) (See Figure 1), and a testing library (disk drive in test station) (See Abstract).

Regarding Claim 22, Limon Jr discloses a structure for compiling said updates (See Col. 32, lines 13-37).

Regarding Claim 23, Limon Jr discloses that said synthesis interface is operable to transfer said updates from said trusted space environment to said design library via a symbolic link (dynamic link) (See Col. 7, lines 31-56).

Regarding Claim 24, Limon Jr discloses that said synthesis interface is operable to transfer said updates from said trusted space environment to an archive database (See Col. 9, lines 27-44 and Figures 1 and 2).

Regarding Claim 25, Limon Jr discloses a library infrastructure system for maintaining a database in a design environment, comprising:

- a first design library (memory portion) in a stable space operable to be accessed by at least one user (See Col. 2, lines 27-67);

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- a second design library (test station) in an unstable space operable to be accessed by at least one librarian (See Col. 2, lines 27-67, Abstract and Figures 1 and 2); and
- an interface (coupling portion) for facilitating file updates of said first and second design libraries, said interface being operable to build said file updates in a trusted space and appropriately transfer said file updates to said first and second design libraries (See Col. 2, lines 27-67).

Regarding Claim 26, Limon Jr discloses that the first and second design libraries are redefined such that said first design library resides in said unstable space operable to be accessed by at least one librarian (the user or operator on the server) (See Figures 1 and 2) and said second design library resides in said stable space operable to be accessed by at least one user (user or operator on test station).

Regarding Claim 27, Limon Jr discloses that permissions associated with said first and second design libraries are changed such that said first design library resides in said unstable space operable to be accessed by at least one librarian (the user or operator on the server) (See Figures 1 and 2) and said second design library resides in said stable space operable to be accessed by at least one user (user or operator on test station).

Regarding Claim 28, Limon Jr discloses the library infrastructure system further comprising a third design library (28) operable to be accessed by said at least one user for testing purposes (from test station) (See Figure 1 and Abstract).

Regarding Claim 29, Limon Jr discloses the library infrastructure system further comprising a third design library (28) operable to store an archive (archive file) of the contents of said first design library (See Figure 1 and Abstract).

Regarding Claim 30, Limon Jr discloses that the second design library is provided to be a mirror copy of said first design library (the memory also stores the test definition) (See Col. 2, lines 26-67).

Regarding Claim 31, Limon Jr discloses a computer-implemented system for updating a library in a design database environment operable to be accessed by at least one design user, comprising:

- means (hard disk in test station) for associating an update file with appropriate design objects to generate an uncompiled update file in a trusted space environment (See abstract and Figure 1, 2);
- means (processor) for compiling said uncompiled update file into a compiled update file (See Col. 7, lines 15-56 and Figures 1, 2); and
- means (FTP) for transferring said compiled update file from said trusted space environment into said library in said design database environment.

(See Col. 7, lines 30-42 and Col. 20, lines 43-59).

Regarding Claim 33, Limon Jr discloses that said update file includes files relating to a design element selected from the group consisting of gates, latches, passive elements, combinatorial elements (a variety of different types of circuit boards, components of the circuit boards) (See Col. 6, lines 49-67).

Regarding Claim 34, Limon Jr discloses that said means for transferring said compiled update file effectuates the transfer of said compiled update file via a symbolic link (dynamic link) between said trusted space environment and said design database environment (See Col. 7, lines 31-56).

Regarding Claim 35, Limon Jr discloses that said means for transferring said compiled update file is operable to transfer said compiled update file from said trusted space environment into an archive database (See Col. 9, lines 27-44 and Figures 1 and 2).

Claim Rejections – 35 U.S.C. 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 21, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Limon, Jr et al. (6,453,435).

Regarding Claim 2, Limon Jr discloses does not explicitly disclose the immunization to corruption. However, it would have been obvious to one of ordinary skill in the art to render the design database environment being immune to corruption in an event of an unsuccessful compilation in said trusted space environment since most of the systems or workstations have installed anti-virus or firewall to protect the system from being hacked.

Regarding Claim 21, Limon Jr discloses that said design library inherently comprises a standard cell library (52, 28, or disk drive) since standard cell methodology is commonly known and used in the skilled in the art and most of the digital logic circuits including any memory and storage device of Limon Jr are designed by such method in order to enhance the efficiency of automated synthesis, place and route tools for complex devices.

Regarding Claim 32, Limon Jr discloses does not explicitly disclose the immunization for corruption. However, it would have been obvious to one of ordinary skill in the art to render the design database environment being immune to corruption in an event of an unsuccessful compilation in said trusted space environment since most of the systems or workstations have installed anti-virus or firewall to protect the system from being hacked.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Carmean et al. (5,459,673) discloses a method and apparatus for optimizing electronic circuits. Hooper et al. (5,150,308) discloses a parameter and rule creation and modification mechanism for use by a procedure for synthesis of logic circuit designs.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Wilson Lee whose telephone number is (571) 272-1824.

Papers related to the application may be submitted by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The official fax number is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Wilson Lee", is written over a horizontal line.

Wilson Lee
Primary Examiner
U.S. Patent & Trademark Office

9/28/06